

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/746,390	12/21/2000	Jens Kossmann	GFB-5 DIV	9564	
1475	590 03/01/2002		EVAN	NIED	
FISH & NEAVE 1251 AVENUE OF THE AMERICAS			EXAMINER FOX, DAVID T		
50TH FLOOR	NY 10020-1105		ART UNIT	PAPER NUMBER	
			1638	6	
			DATE MAILED: 03/01/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No. 09/746,390	Applicant(s)	Kossman	ne	Xa
Office Action Summary	Examiner From		Group Art Unit		
—The MAILING DATE of this communication appears	on the cover sheet be	eneath the co	rrespondence add	tress—	
Period for Reply	-/-				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO OF THIS COMMUNICATION.	EXPIRE	MONTH(S)	FROM THE MAILI	NG DATE	<b>:</b>
<ul> <li>Extensions of time may be available under the provisions of 37 CFR 1.1 from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days, a repleted NO period for reply is specified above, such period shall, by default, erailure to reply within the set or extended period for reply will, by statute</li> </ul>	y within the statutory minim xpire SIX (6) MONTHS from	um of thirty (30) on the mailing date	lays will be considered of this communication	I timely.	<b>;</b>
Status					
☐ Responsive to communication(s) filed on					
☐ This action is <b>FINAL</b> .					
<ul> <li>Since this application is in condition for allowance except for accordance with the practice under Ex parte Quayle, 1935</li> </ul>	or formal matters, <b>pros</b> e C.D. 1 1; 453 O.G. 213	ecution as to 1 3.	the merits is clos	ed in	
Disposition of Claims					
© Claim(s) 41-87					
Of the above claim(s)		is/are w	vithdrawn from con	sideration	1.
☐ Claim(s)	is/are a	is/are allowed.			
☐ Claim(s)		is/are re	ejected.		
□ Claim(s)		are sub	pject to restriction of ment.	r election	
Application Papers					
☐ See the attached Notice of Draftsperson's Patent Drawing					
☐ The proposed drawing correction, filed on		☐ disapproved	<b>i</b> .		
☐ The drawing(s) filed on is/are objects	ed to by the Examiner.				
☐ The specification is objected to by the Examiner.					
☐ The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. § 119 (a)-(d)					
All Some* None of the CERTIFIED copies of the					
<ul> <li>□ received.</li> <li>□ received in Application No. (Series Code/Serial Numbe</li> <li>□ received in this national stage application from the Intel</li> </ul>	r) <u>09/045, 3</u> mational Bureau (PCT)	<i>60</i> Rule 1 7.2(a)).	·		
*Certified copies not received:			·		
Attachment(s)					
☐ Information Disclosure Statement(s), PTO-1449, Paper No.	o(s)	Interview Sumr	mary, PTO-413		

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97)

☐ Notice of Reference(s) Cited, PTO-892

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

Part of Paper No.

☐ Notice of Informal Patent Application, PTO-152

□ Other\_

**Office Action Summary** 

Application/Control Number: 09/746,390

Art Unit: 1638

Claims 53, 58, 59, 65, 68, 70, 72-74, 81 and 87 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend upon another multiple dependent claim. See MPEP § 608.01(n). In the interest of compact prosecution, these claims have been examined for restriction purposes. Such treatment of the claims does not relieve Applicants of the responsibility to respond to this objection.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 41-42, drawn to starch with increased phosphate content isolated from plants with increased phosphorylase levels, classified in class 536, subclass 102, for example.
- II. Claims 43 and 45-46, drawn to isolated phosphorylase protein and antibodies thereto, classified in class 530, subclass 370, for example.
- III. Claims 44 and 78-79, drawn to cells and plants transformed with a phosphorylase gene in sense orientation and a method for producing phosphorylase protein, classified in class 800, subclass 284, for example.
- IV. Claims 47 and 80, drawn to oligonucleotide probes, classified in class 536, subclass 24.3, for example.
- V. Claims 48-49, 51-58, 60-63, 65-69, 73-76 and 81, drawn to DNA encoding antisense RNA or ribozymes to a phosphorylase gene, plant cells and plants transformed therewith, and methods for its use to obtain starch with reduced phosphate content, classified in class 800, subclass 286, for example.

Art Unit: 1638

- VI. Claims 50 and 64, drawn to DNA encoding a portion of a phosphorylase gene in sense orientation sufficient for sense cosuppression in transformed cells, classified in class 536, subclass 23.6, for example.
- VII. Claims 59, 70-72 and 82-87, drawn to starch with reduced phosphate content isolated from plants with reduced levels of phosphorylase protein, classified in class 435, subclass 101, for example.
- VIII. Claim 77, drawn to a method for making French fries, classified in class 426, subclass 438, for example.

The inventions are distinct, each from the other because:

Inventions III and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process such as chemical synthesis or isolation from non-transformed plants.

Inventions III and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the

Application/Control Number: 09/746,390

Art Unit: 1638

product as claimed can be made from a materially different process such as isolation from mutant, non-transformed plants or chemical modification of starch isolated from wild-type plants.

Inventions V and VII are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process such as isolation from a mutant, non-transformed plant or chemical modification of starch isolated from wild-type plants.

Inventions V and VIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be utilized in a materially different process such as propagation of desirable transformed plant genotypes.

Inventions I-VII and VIII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation and different functions.

The isolated starch of Groups I and VII is not required by any other Group, and is biochemically distinct from each other in terms of its phosphate content.

Application/Control Number: 09/746,390

Art Unit: 1638

The isolated protein of Group II is not required by any other Group.

The methods of plant cell transformation and regeneration of Groups III, V and VI are not required by any other Group. The antisense RNA- or ribozyme-encoding constructs of Group V are not required by any other group. The sense constructs of Groups III and VI are not required by any other group. The full-length protein-encoding construct and methods for evaluating protein production of Group III are not required by any other group. The methods for evaluating gene inhibition of Groups V and VI are not required by any other group.

The isolated oligomeric probe of Group IV is not required by any other group.

Furthermore, the full-length gene of Group III could be made a method other than the use of the probe of Group IV, such as chemical synthesis.

The food processing reagents and procedures of Group VIII are not required by any other group.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, classification, and fields of search, restriction for examination purposes as indicated is proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 1638

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Fox whose telephone number is (703) 308-0280. The examiner can normally be reached on Monday through Friday from 10:30AM to 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached on (703) 306-3218. The fax phone number for this Group is (703) 872-9306. The after final fax phone number is (703) 872-9307.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

February 26, 2002

DAVID T. FOX
PRIMATIVE THE COUNTRY

COUNTRY 400 (6)8

Page 6